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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/942,891

08/30/2001

Kenneth J. Gruys

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(MOBT:1)

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07/07/2004

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EXAMINER

KRUSE, DAVID H

ART UNIT

PAPER NUMBER

1638

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/942,891	Applicant(s) GRUYS ET AL.	
	Examiner David H Kruse	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/30/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

STATUS OF THE APPLICATION

1. This Office action is in response to the Amendment and Remarks filed 3 May 2004.
2. The Examiner approves the drawings filed 30 August 2001.
3. The objections to the specification are withdrawn in view of Applicant's amendments.
4. Those rejections not specifically addressed in this Office action are withdrawn in view of Applicant's amendments to the claims.
5. The rejection for obviousness-type double patenting over U.S. Patent 5,942,660 is withdrawn. The Terminal Disclaimer filed 3 May 2004 has been approved and made of record.
6. The rejections of the claims under 35 USC 102(b) are withdrawn in view of Applicant's amendments to the claims.
7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Oath/Declaration

8. The oath or declaration remains defective. A new oath or declaration in compliance with 37 CFR § 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration remains defective because of the issues put forth in the previous Office action. Applicant states in the response that the instant application is a divisional of previously filed U.S. Patent Application Serial No. 09/313,123 and that

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Applicants included copies of the declarations executed by the inventors in the previously filed application (Serial No. 09/313,123) when filing the instant application. Applicants also argue that the Updated Filing Receipt appears to indicate the correct domestic priority data (page 6 of the Remarks). This argument is not persuasive because the filing receipt does not constitute compliance with 37 CFR § 1.76(b)(5), and the Request for Filing Divisional Application, filed 30 August 2001, does not contain a section directed to Domestic Priority Information, only a section directed to an amendment to the specification (item 11). The information directed to domestic priority in the Declaration of record is incorrect; U.S. Application No. 06/673,388 was not filed 28 June 1996, but in fact filed in 1984 and does not share continuity with the instant application as is required under 35 U.S.C. § 120. Applicant can remedy the instant situation by either filing a corrected Declaration, or alternatively filing a Supplemental Application Data Sheet (see 37 CFR § 1.76 (c) and (d)).

Claim Rejections - 35 USC § 112

9. Claims 42-46 remain rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is repeated for the reason of record as set forth in the last Office action mailed 29 January 2004. Applicant's arguments filed 3 May 2004 have been fully considered but they are not persuasive.

Applicants argue that amino acid positions are commonly used by those of skill in the art to refer to particular locations within a protein or peptide sequence that amino acid numbering starts at the N-terminus of the protein or peptide, and increases by one

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with each additional amino acid residue (i.e. the amino acid at the N-terminus is position 1, the next amino acid is position 2, and so on) and that this information on amino acid position numbering can be found in all basic biochemistry textbooks. Applicants further argue that the claims at each instance refer to the amino acid number relative to the wild type protein, i.e., the amino acid sequence found in nature (page 8, 4th paragraph of the Remarks). This argument is not found to be persuasive because amino acid positions are relative to the protein in which they occur, as such, amino acids in proteins having the same function from different organisms can and often do have different positional locations due to natural variations in the amino acid sequence. Therefore the claims contain relative limitations that do not teach the metes and bounds of the claimed invention. Applicant states that the nucleic acid sequence of SEQ ID NO: 1 encodes the wild type threonine deaminase protein of *E. coli* on page 143, line 5. The Examiner suggests that the claims be amended to replace "of the wild type protein" with -- relative to said position(positions) in the protein encoded by SEQ ID NO: 1 -- to overcome this rejection.

Claims 44 and 46 remain rejected as unclear if the claimed recombinant host cell or transgenic plant has been transformed with a nucleic acid encoding a threonine deaminase protein. Applicant states that claim 44 has been amended to indicate that the threonine deaminase protein has an amino acid sequence that is a variant relative to the wild-type protein that would be present naturally in a cell of the same species (page 9, 4th paragraph of the Remarks, and similarly on page 10, 1st paragraph for claim 46). This is not found to be persuasive and appears to miss the point of the rejection.

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The Examiner suggests that the phrase "a nucleic acid sequence" at line 1 be amended to read -- an isolated or recombinant nucleic acid --, such a limitation would also be consistent with claim 42.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. The claims are free of the prior art, which neither teaches nor suggests a nucleic acid encoding a threonine deaminase with the claimed amino acids at positions 447 and/or 481 relative to said positions in the protein encoded by SEQ ID NO: 1.


12. No claims are allowed.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David H. Kruse, Ph.D. whose telephone number is (571) 272-0799. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Amy Nelson can be reached at (571) 272-0804. The fax telephone number for this Group is (703) 872-9306 Before Final or (703) 872-9307 After Final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group Receptionist whose telephone number is (571) 272-0547.


DH 1638

David H. Kruse, Ph.D.

2 July 2004

14. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.